

CLAIMS

1. A framework for providing information technology solutions, the framework comprising:
 - a first knowledge base of characteristics that describe products and functions, wherein a combination of products performs a set of functions;
 - a second knowledge base that manages relationship information regarding the interactions of products and defines all valid product combinations, wherein each valid product combination forms a network unit; and
 - a third knowledge base that manages information regarding the interconnectability of network units, wherein a valid combination of network units comprises a configuration.
2. The framework of claim 1, wherein the first knowledge base of characteristics includes generic characteristics that describe a set of products or functions having similar characteristics.
3. The framework of claim 1, wherein the second knowledge base includes generic network units that describe a set of network units that perform similar functions.
4. The framework of claim 1, further comprising a fourth knowledge base that includes clouds, wherein each cloud describes a set of possible configurations that can fulfill a predetermined function.

1 5. The framework of claim 1, wherein each configuration comprises at least one network unit
2 partnership.

1 6. The framework of claim 1, further comprising a key word search engine that allows
2 characteristics to be searched.

1 7. The framework of claim 1, further comprising a solution knowledge base, wherein each
2 solution includes a set of customer specific configurations.

1 8. The framework of claim 7, further comprising a box knowledge base that includes a product
2 listing for each solution in the solution knowledge base.

1 9. The framework of claim 8, further comprising a network knowledge base that includes a set of
2 boxes.

1 10. The framework of claim 9, further comprising a customer knowledge base that includes
2 customer specific information.

1 11. The framework of claim 4, further comprising a solution advisor tool for designing a
2 solution made up of a set of network units, the solution advisor tool comprising:
3 a system for specifying the solution using a selected cloud;
4 a system for replacing the selected first cloud with a set of clouds;
5 a system for replacing the selected cloud with at least one configuration;
6 a system for replacing a selected configuration with at least one network unit; and
7 a system for replacing a generic network unit with a specific network unit.

1 12. The framework of claim 11, wherein the solution advisor tool further comprises a system for
2 replacing a generic characteristic with a specific characteristic.

1 13. A solution advisor tool for designing an information technology (IT) solution, comprising:
2 a knowledge management system for generating and storing information in a hierarchical
3 format, wherein the knowledge management system includes:
4 a first knowledge base of characteristics;
5 a second knowledge base that manages relationship information regarding the
6 interactions of characteristics and defines all valid characteristic combinations, wherein
7 each valid characteristic combination forms a network unit;
8 a third knowledge base that manages information regarding the interconnectability
9 of network units, wherein a valid combination of network units comprises a
10 configuration; and
11 a fourth knowledge base that manages information regarding sets of possible
12 configurations that can fulfill a predetermined function, wherein each set comprises a
13 cloud; and
14 a design interface system for generating the IT solution, comprising:
15 a system for specifying the solution using a first cloud;
16 a system for replacing the first cloud with a set of second clouds;
17 a system for replacing a selected cloud with at least one configuration;
18 a system for replacing a selected configuration with at least one network unit; and
19 a system for replacing a generic network unit with a specific network unit.

1 14. The solution advisor tool of claim 13, further comprising a fifth database of keywords.

1 15. The solution advisor tool of claim 13, further comprising a sixth knowledge base of valid
2 network unit partners.

1 16. The solution advisor tool of claim 13, wherein the characteristics comprise products and
2 functions.

1 17. The solution advisor tool of claim 13, characteristics comprise generic products and specific
2 products.

1 18. The solution advisor tool of claim 17, wherein the design interface further includes a system
2 for replacing generic products with specific products.

1 19. A program product stored on a recordable medium, which when executed provides a system
2 for generating an information technology solution, comprising:

3 a system for specifying a generic solution using a cloud selected from a plurality of
4 clouds, wherein each cloud provides a set of possible configurations that can fulfill a
5 predetermined function, and wherein each configuration includes a valid set of network units,
6 and wherein each network unit comprises a set of characteristics;

7 a system for replacing the cloud with at least one second cloud, wherein the at least one
8 second cloud includes a more specific set of configuration details;

9 a system for replacing a selected cloud with at least one configuration;

10 a system for replacing a selected configuration with at least one network unit; and

11 a system for replacing a generic network unit with a specific network unit.

1 20. The program product of claim 19, further comprising a system for replacing generic
2 characteristics with specific characteristics.

1 21. The program product of claim 19, wherein the set of characteristics include products and
2 functions.

1 22. The program product of claim 19, wherein the program product further includes a system for
2 storing and managing information regarding the clouds, configurations, network units and
3 characteristics.

1 23. A solution advisor tool for generating an information technology solution, comprising:
2 a cloud knowledge base that includes a plurality of clouds, wherein each cloud provides a
3 set of possible configurations that can fulfill a predetermined function, and wherein each
4 configuration includes a valid set of network units, and wherein each network unit comprises a
5 set of compatible characteristics; and
6 a system for designing a solution using clouds selected from the cloud knowledge base.

1 24. The solution advisor tool of claim 23, wherein the cloud knowledge base includes business
2 need clouds that contain application cloud network units and application gateway network units.

3 25. The solution advisor tool of claim 23, wherein the cloud knowledge base includes
4 application clouds that contain transport cloud network units and transport gateway network
5 units.

6 26. The solution advisor tool of claim 23, wherein the cloud knowledge base includes transport
1 clouds that contain bridged cloud network units, subnetwork cloud network units and subnetwork
2 gateway network units.

3 27. The solution advisor tool of claim 23, wherein the cloud knowledge base includes bridged
4 clouds that contain subnetwork cloud network units and subnetwork gateway network units.

1 28. The solution advisor tool of claim 23, wherein the cloud knowledge base includes
2 subnetwork clouds which contain gateway network units.

1 29. The solution advisor tool of claim 23, further comprising:

2 a system for combining characteristics stored in a characteristic knowledge base to
3 generate the set of network units, wherein the set of network units are stored in a network unit
4 knowledge base; and

5 a system for combining network units stored in the network unit knowledge base to
6 generate the possible configurations, wherein the possible configurations are stored in a
7 configuration knowledge base.